

Description of the Expedition (Cont.)

SOV/1637

conducted in cooperation with the IGY program. A large part of the observations and preliminary findings cited are in the field of hydrology and hydrochemistry, marine geology, geophysics, hydrography, and hydrobiology. A roster of the members of the expedition together with their specialities is included. There are 72 figures, including maps. Bibliographic references accompany separate chapters.

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AVAILABLE: Library of Congress

MM/bmd
5-28-59

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USMANOV, R.F.

PLATE I BOOK REFERENCE 807/566

Nauchaya konferentsiya po problemam meteorologii Antarktiki, Moscow, 1979
Tseyd' doklady (Theses of Reports at the Scientific Conference on Meteorological Problems in Antarctica, Moscow, 1979) Moscow, Glimetrometizdat (Odessa) 1979. 67 p. 1,000 copies printed.

Ed.: O.G. Erichuk; Tech. Ed.: I.M. Sakh.

PURPOSE: The publication is intended for meteorologists, particularly for those interested in the climatology of Antarctica.

CONTENT: This book contains summaries of thirty-five reports presented at the Scientific Conference on Meteorological Problems in Antarctica, held in Moscow, October 25 to 28, 1979. The summaries are arranged in four groups: (1) general problems of the geography of Antarctica; (2) atmospheric circulation; (3) radiation balance; (4) heat balance, climate and physical features of individual elements; (5) methods of observation and measurement. No personalities are mentioned. There are no references.

PLATE III. SUMMARY BALANCE, HEAT BALANCE, CLIMATE, AND THE CONDITIONS OF INDIVIDUAL ELEMENTS

- 1. Boris, B.P. [Candidate of Geographical Sciences, Glanaya geofizicheskaya Observatoriya im. A.I. Voznyakova (Main Geophysical Observatory im. A.I. Voznyakov)] Radiation Balance of the Surface of the Snow in Antarctica
- 2. Boris, B.P. [Candidate of Physics and Mathematics, Tsentrallyy aerologicheskyy Observatoriya (Central Aerological Observatory)] Shoreline Radiation Balance in the Troposphere, and Albedo of the Underlying Surface of the Antarctic Alps and the Davis Sea According to the Results of Antismetric Observations From Aircraft
- 3. Boris, B.P. [Main Geophysical Observatory im. A.I. Voznyakov] Turbulent Heat and Humidity Exchange in the Air Layer Near the Ground in Antarctica
- 4. Boyev, V.A. [Central Forecasting Institute] Climatic Zones of Eastern Antarctica
- 5. Boyev, V.P. [Candidate of Geographical Sciences] and D.I. Stetskovskiy [Central Forecasting Institute] Mean Monthly Fields of Air Pressure and Temperature Over Antarctica and the Southern Hemisphere
- 6. Boyev, V.P. [Candidate of Geographical Sciences, Tsentrallyy Institut Meteorologii (Central Forecasting Institute)] Geophysical Basis for the Connection Between the Antarctic Low-Pressure Zone and the Belt of Antarctic Submarine Troughs
- 7. Gusev, A.N. [Institute of Applied Geophysics, AS USSR] Physical Causes of the Climatic Feature in the Interior Regions of Antarctica
- 8. Kaban, O.M. [State Oceanographic Institute] Characteristics of Swirls (Cyclonic Voids) in Antarctica
- 9. Kaban, O.M. [Candidate of Geographical Sciences, Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy Institut (Scientific Research Institute for Arctic and Antarctic)] Special Features of the Relief of Eastern Antarctica in Relation to Weather Characteristics
- 10. Loshin, T.Y. [Glanaya geofizicheskaya Observatoriya im. A.I. Voznyakov] Investigation of the Electric Field
- 11. Loshin, T.Y. [Candidate of Geographical Sciences, Glanaya geofizicheskaya Observatoriya im. A.I. Voznyakov] Physical Basis of the Geophysical Observation in Antarctica: Conditions for the Formation of the Snow Cover in Antarctica

Card 6/1

USMANOV, R.F., kand.teograficheskikh nauk

Coincidence of the Antarctic low pressure zone with sub-Antarctic
underwater trenches. Inform. biul. Sov. antark. eksp. no.24:5-9
'60. (MIRA 14:5)

1. TSentral'nyy institut prognozov.
(Antarctic regions--Ocean bottom) (Atmospheric pressure)

3 5000

31520
S/169/61/000/010/022/053
D228/D304

AUTHOR: Usmanov, R. F.

TITLE: Aerologic maps at standard levels and the prospects of using them in synoptic meteorology and aeroclimatology

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1961, 2, abstract 10B18 (Tr. N.-i. in-ta aeroklimatol., no. 14, 1961, 153-156)

TEXT: The introduction of aerologic maps at standard levels into the practice of synoptic meteorology and aeroclimatology is suggested as a more perspective method of analyzing aerologic observations. When determining the geopotential, the acceleration of the force of gravity is assumed to be constant. Meanwhile, in the case of non-stationary processes, even slight variations of the force of gravity may be of substantial significance. The force of gravity equation for the atmosphere has the form:

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Aerologic maps at...

$$g = \gamma \frac{M}{(R + h)^2} - (\omega \pm \omega')^2 (R + h) \cos^2 \varphi$$

where γ is the universal gravity constant, M is the earth's mass, R is the earth's radius, ω is the angular rate of the earth's rotation, h is the height above the average level of the spheroid, and ω' is the zonal angular rate of air displacement at the given level. The decrease in the force of gravity at the expense of the first member of the equation from sea-level to 20 km reaches 6 cm/sec.², but by taking the second term into account, this value will increase in a direction towards the equator. The second term's contribution is principally determined by the increment of ω' . At the time of westerly flows, the force of gravity will decrease, but it will increase during easterly flows. The greatest changes at the expense of the circulation of zonal flows are observed at the equator and may reach 4 - 5 cm/sec.², which corresponds to pressure changes of 4 - 5 mb at sea-level. Consequently, for calculating

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Aerologic maps at...

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the geopotential it is necessary to take into account changes in the force of gravity, which depends on the direction and speed of the wind. Most errors in the calculation of the geopotential are assumed in non-stationary processes. The advantage of pressure maps at standard levels is that the mass divergence may be calculated from them; they permit examination of the atmosphere within constant volumes and the construction of real particle-trajectories. [Abstracter's note: Complete translation.]

X

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USMANOV, R.F.

Aerological maps for standard levels and the outlook for their use
in synoptic meteorology and aeroclimatology. Trudy NIIAK no.14:
153-156 '61. (MIRA 15:1)

1. TSentral'nyy institut prognozov.
(Meteorology--Charts, diagrams, etc.)

S/169/61/000/012/006/039
D228/D305

AUTHOR: Usmanov, R. F.
TITLE: The influence of the earth's rotation on the
general atmospheric circulation
PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961,
51, abstract 12B307 (Tr. Tsentr. in-ta prog-
nozov, 1961, no. 104, 3-40)
TEXT: As a matter for discussion, the author considers and
substantiates the following main conclusions derived by him.
(1) The extremes of the mid-latitudinal distribution of atmos-
pheric pressure are found on the main critical parallels of the
rotation ellipsoid that is equidimensional to the earth. (2)
The intensity of the subtropical high-pressure zones of the nor-
thern and southern hemispheres has a synchronous or unitary
character which cannot be explained by seasonal changes in the

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The influence of the...

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inclination of solar rays. (3) The deformation forces of the earth's contraction, arising in rotation figures as a result of their tendency to assume a globular shape, is of substantial significance in the formation of fields of atmospheric pressure. (4) The zonal axis of the subtropical high-pressure zone coincides with the critical contraction parallel along which the convergence of the deformation forces of the earth's contraction is observed. (5) The latitudinal shifts of the zonal axes of the subtropical high-pressure belts are related to the changes in the speed of the earth's rotation; in periods of the accelerated rotation of the earth's lithosphere, the subtropical high-pressure zones are displaced to the side of the high latitudes, but in periods of its retarded rotation they shift to the side of the low latitudes. [Abstracter's note: Complete translation.]

Card 2/2

POGOSYAN, Kh.P., nauchnyy red.; KATS, A.L., nauchnyy red.; KHRABROV,
Yu.B., nauchnyy red.; USMANOV, R.F., nauchnyy red.;
BLINNIKOV, L.V., red.; ZARKH, I.M., tekhn. red.

[Transactions of the First Conference on General Atmospheric
Circulation, March 14-18, 1960] Trudy Nauchnoy konferentsii
po voprosam obshchey tsirkulyatsii atmosfery. 1st, Moscow.
Moskva, Gidrometeoizdat (otdelenie) 1962. 231 p.

(MIRA 16:4)

1. Nauchnaya konferentsiya po voprosam obshchey tsirkulyatsii
atmosfery. 1st, Moscow, 1960. 2. Tsentral'nyy institut progno-
zov, Moskva (for Pogosyan, Kats, Usmanov).
(Atmosphere)

S/169/62/000/001/056/083
D228/D302

AUTHOR: Usmanov, R. F.

TITLE: Aerologic maps at standard levels and their prospective use in synoptic meteorology

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 54, abstract 1B346 (Tr. Tsentr. in-ta prognozov, no. 104, 1961, 123-128)

TEXT: The present universally adopted method of the baric topography possesses a number of deficiencies, of which the main one is the impossibility of duly allowing for the non-stationary nature of atmospheric processes. It is pointed out that apart from the earth's mass, its angular velocity, the distance from the center, and the latitude, the gravity value entering into different formulas also depends on the zonal component of the velocity. The advantage of aerologic maps for standard heights is indicated; these permit the ready calculation of the divergence of mass above the sounding points both for layers of different thickness and for the

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Aerologic maps at ...

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whole atmosphere, the examination of processes within constant volumes, the study of the influence of Archimedean forces on vertical movements in the atmosphere, etc. It is suggested that aerologic maps at standard levels should be introduced into aeroclimatology and synoptic meteorology together with the use of maps of the baric topography. 8 references. / Abstractor's note: Complete translation. /

Card 2/2

SKIYAROV, V.M., otv. red.; GRIBANOV, N.N., red.; MURONTSEV, A.M., red.; POGOSYAN, Kh.P., red.; PROTOPOPOV, V.S., red.; RUDNEV, G.V., red.; SOKOLOV, A.A., red.; SOLOV'YEV, V.A., red.; USMANOV, R.F., red.; ZHDANOVA, L.P., red.; RUSAKOVA, G.Ya., red.; CHEPELKINA, L.A., red.; KOLESOVA, Z.M., tekhn.red.

[Man and the elements; hydrometeorologic desk calendar for 1964] Chelovek i stikhiia; nastol'nyi gidrometeorologicheskii kalendar' 1964. Leningrad, Gidrometeorologicheskoe izd-vo, 1963. 154 p. (MIRA 17:2)

USMANOV, R.F.

Use of the technology of mechanized counting for studying
the general circulation of the atmosphere. Trudy NIIAK
no.21:79-94 '63. (MIRA 17:3)

SHTERBINOVSKII, N. [Shcherbinovskiy, N.], prof.; USMANOV, R.

In rhythm with the sun. Priroda Bulg 13 no.5:78-79 S-6 '64.

1. Corresponding Member, V.I. Lenin All-Union Academy of Agricultural Sciences (for Shcherbinovskiy). 2. Head, Department of Satellite Meteorology at the Central Institute of Weather Forecasts (for Usmanov).

BACHURINA, A. A.; PAVLOVSKAYA, A. A.; USMANOV, R. F.

Khoren Petrovich Pogolian; 1904- on his 60th birthday. Meteor.
i gidrol. no. 4:61-62 Ap '64. (MIRA 17:5)

WAYTSEVA, N.A.; UDMENOV, R.F.

Vertical cross section of the atmosphere in the equatorial
zone of the central part of the Pacific Ocean. Trudy TSIP
no.137:83-93 '64. (MIRA 17:9)

BURAKOV, I. M., USMANOV, R. K.

Treatment of certain forms of deafness by transplant of preserved tissue of aloe. Vest. otorinol. 12:4, July-Aug. 50. p. 44-6

1. Of the LOR (Otorhinolaryngological) Clinic (Head—Prof. I. M. Burakov), Astrakhan' Medical Institute (Director—Prof. S. S. Serebrennikov).

OLML 19, 5, Nov., 1950

USMANOV, K. K.

"Data on the Problem of Papillomatosis of the Throat in Children." Cand Med Sci, Central Inst for the Advanced Training of Physicians, Min Health, Moscow, 1955. (KL, No 12, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

RUSTAMOV, Kh.R.; USMANOV, R.U.

Mutarotation of glucose in the presence of anion exchangers.
Uzb.khim.zhur. 6 no.2:36-38 '62. (MIRA 15:7)

1. Tashkentskiy politekhnicheskiy institut.
(Glucose—Optical properties)
(Ion exchange)

USMANOV, R.U.; RUSTAMOV, Kh.H., doktor khim. nauk

Some problems of anion-exchange catalysis. Uzb. khim. zhur.
9 no. 4:64-68 '65. (MIRA 18:12)

1. Tashkentskiy politekhnicheskiy institut. Submitted July 31,
1964.

USMANOV, R.U.; RUSTAMOV, Kh.R.

Kinetics of the condensation of furfural with nitromethane in
the presence of an anion exchanger. Report No.2. Uzb.khim.zhur.
8 no.1:82-86 '64. (MIRA 17:4)

1. Tashkentskiy politekhnicheskiy institut.

USMANOV, S.M., aspirant

Copper metabolism in the organism of patients with acute
bacillary dysentery of average severity. Med. zhur. Uzb.
no.9:42-45 S '62. (MIRA 17:2)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. I.K.
Musabayev) Tashkentskogo gosudarstvennogo instituta usover-
shenstvovaniya vrachey.

BEZHODNOV, Nikolay Aleksandrovich; USMANOV, Saidmakhmud Nogmanovich;
SOLYANOVA, H., red.; BAKHTIYAROV, A., tekhn.red.

[Accumulation of general funds on collective farms of Uzbekistan]
Nakoplenie obshchestvennykh fondov v kolkhozakh Uzbekistana.
Tashkent, Gos. izd-vo Uzbekskoi SSR, 1958. 55 p. (MIRA 11:5)
(Uzbekistan--Collective farms)

USMANOV, S.Z.

Converting single-phase voltage into m-phase voltage using RC
circuits. Izv. AN Uz. SSR. Ser. tekhn. nauk no. 2:35-41 '57.

(Electric current converters)

(MIRA 11:7)

83523
S/167/59/000/006/002/002
A110/A029

13.2000

AUTHOR: Usmanov, S. Z.

TITLE: Electronic Devices for Control of the System: "Ionic Frequency Converter - Asynchronous Motor"

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, 1959, No. 6, pp. 20-31.

TEXT: The main problems in modern electrical drives is the development of controllable a-c drives and a wide use of simple asynchronous electric motors. The solution of this problem will aid the complex automation of the industry. A new method of regulating the velocity of asynchronous electric motors consists in the alteration of their frequency. However, the realization needs an efficient frequency converter of which the ionic frequency converter is to be preferred (Refs. 1, 2). In the automated-electronic-drive laboratories of the Institut energetiki i avtomatiki (Institute of Power Engineering and Automation) of the AN Uzbekskoy SSR (AS of the Uzbekskaya SSR) the properties of the ionic system asynchronous motor were examined (Refs. 3-8) and electron-ion elements for control of its operation were developed. - In order to get a voltage with an alternating frequency, X

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A110/A029

Electronic Devices for Control of the System: "Tonic Frequency Converter - Asynchronous Motor"

the grids of the autonomous inverter are to be supplied with impulses of alternating frequency, following a strict sequence (Fig. 1). For the drive system in question some grid-control devices were already developed (Ref. 9). The grid-control device consists of: a generator of sinusoidal voltage, a limiting-amplifier with a differentiator, a power amplifier and a rectifier. Fig. 2 shows a three-phase grid-control device, Fig. 3 a single-phase generator (a) and a converter with an impulse-generating device for one phase (b). Experiments have shown that devices consisting of a three- or single-phase RC-type electronic generator of sinusoidal voltage show the best results. The three-phase generator is a three-valve amplifier with additional elements, producing 150-200 v and a frequency ranging from 5 cycles per second to some kilocycles. The following tubes can be used: 6П6С (6P6S), 6П3С (6P3S), 6П9 (6P9), 6П14П (6P14P), 6П1П (6P1P), Г-807 (G-807). The output voltage of the single-phase generator is converted into three phases by the author's method (Fig. 3, a, b, Ref. 10). The limiting amplifier with a converter is used to convert the sinusoidal voltage into impulses with a steep frontal section, which are first converted into a rectangular form and then amplified

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A110/A029

Electronic Devices for Control of the System of Ionic Frequency Converter -
Asynchronous Motor"

and converted. The power amplifier is needed after the differentiation, yielding 40 watts at 150 volts. A 6H5C (6N5S), 6P9, 6P14P tube is used. The mentioned device is being examined during 3 years at the inverter and rectifier installations of the Power Engineering and Automation Institute of the Uzbekskaya SSR with TPI-40/15, TPI-6/15 thyratrons. A substitution of the electron tubes by flat triodes brought a power increase of the control impulse (more than 100 watts at 150 volts). Semiconductors have shown positive results. Main breakdowns are short-circuits, back-firings and the tilting of the inverter. A circuit diagram of a high-speed grid-protection of an autonomous inverter unit is shown (Fig. 4) and described. The relay operates in 0.1-0.15 seconds. The unit operated for two years in the ionic-frequency-converter installation with high sensitivity and reliability. In Fig. 5 an oscillogram is shown of the switching off of an ionic converter by this protective device. A stabilizing and regulating device for the output voltage of the ionic frequency converter, which carries out automatically the stabilization and regulation of the output voltage by means of influencing the angle of regulation α , is described. A principal (a) and a detailed

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S/167/59/000/006/002/002
A110/A029

Electronic Devices for Control of the System: "Tonic Frequency Converter - Asynchronous Motor"

(b) circuit diagram of the device is given in Fig. 6. There are 3 different diagrams of phase displacing circuits with an impulse producing device (Figs. 7a, 7b and 8). The device shown in Fig. 6b was tested in an inverter installation (Ref. 6). Figs. 9(a,b,c) and Figs. 10(a,b,c) are reproductions of oscillograms of this testing process. This article was made under the guidance of M. Z. Khamudkhanov. There are 10 figures and 10 Soviet references. ✓

ASSOCIATION: Institut energetiki i avtomatiki AN Uzbekskoy SSR (Institute of Power Engineering and Automation, AS Uzbekskaya SSR)

SUBMITTED: July 12, 1959

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ACCESSION NR: AR3006173

S/0275/63/000/007/V031/V032

SOURCE: RZh. Elektronika i yeye primeneniye, Abs. 7V183

AUTHOR: Usmanov, S. Z.

TITLE: Electronic devices for grid control of ionic converters

CITED SOURCE: Sb. Vopr. energ., avtomatiki, mekhan. i gorn. dela. Tashkent AN UzSSR, 1962, 5-17

TOPIC TAGS: rectifier grid control, electronic circuit, transistorized circuit

TRANSLATION: A description is presented of a recently developed universal, high-speed, electronic, grid control circuit. The block diagram of the grid-pulse generator consists of the following elements: an electronic bridge-type phase-shifting network, amplifier-limiter for sinusoidal voltage, differentiating element and an output power unit. The phase-shifting network is a bridge circuit, the reactive arm of which is a resonant circuit, and the variable active element is a transistor connected through a step-down transformer and a bridge-type rectifier. The amplified and limited alternating sinusoidal voltage is differentiated with a transistor connected as a load for the first amplifier stage. In the same stage,

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ACCESSION NR: AR3006173

the width of the pulse is regulated by shunting the transformer winding. The complete circuit of the vacuum-tube oscillator for the grid pulse, for one phase of the transformer, contains three vacuum tubes. A similar circuit, built with transistors, contains also three amplifier elements. The pulse amplitude at the output of the circuit is 200 volts for a load of 1,000 ohms. The width of the pulse is regulated from 10 to 150 C. Tests of the circuits have shown them to be highly operative and reliable. The ambient temperature fluctuated during operation from 10 to 42 C. Bibliography, 10 titles. L. R.

DATE ACQ: 21Aug63

SUB CODE: EE

ENCL: 00

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KHAMUDKHANOV, M. Z.; TROITSKIY, V. A.; USMANOV, S. Z.

Transformer regulating output voltage by means of a magnetic commutator. Izv. AN UzSSR. Ser. tekhn. nauk 6 no.5:38-43 '62. (MIRA 15:10)

1. Institut energetiki i avtomatiki AN UzSSR.

(Electric transformers)

KHAMUDKHANOV, M.Z.; USMANOV, S.Z.

Transformer with stepless control of secondary voltage by varying the magnetic flux by means of a magnetic shunt. Izv. AN Uz. SSR. Ser. tekhn. nauk 7 no.1:9-13 '63. (MIRA 17:6)

1. Institut energetiki i avtomatiki AN UzSSR.

KHAMUDKHANOV, M.Z.; USMANOV, S.Z.

Measurement of the angular velocity of a micromotor. Izv. AN
Uz. SSR. Ser. tekhn. nauk 8 no.1:85-86 '64. (MIRA 17:6)

1. Institut energetiki i avtomatiki Gosudarstvennogo komiteta
po energetike i elektrifikatsii SSSR.

KHAMUDKHANOV, M.Z.; USMANOV, S.Z.

Setup for transforming monophas voltage into three- and six-phase pulse voltage for the control of multiphase ionic inverters. Izv. AN Uz. SSR. Ser. tekhn. nauk 8 no.2:5-13 '64. (MIRA 17:6)

1. Institut energetiki i avtomatiki AN UzSSR.

KHAMUDKHANOV, M.Z.; USMANOV, S.Z.; MUMINOV, K.

Automatic damping of unwanted oscillations in electromechanical systems with a rectifier converter. Dokl. AN Uz. SSR 21 no. 11: 31-35 '64. (MJRA 18:12)

1. Uzbekskiy nauchno-issledovatel'skiy institut energetiki i avtomatiki. 2. Chlen-korrespondent AN UzSSR (for Khamudkhanov). Submitted June 19, 1964.

USMANOV, U.

Accessory rutile, ilmenite, apatite, zirconite, and magnetite
from microcline. Zap. Ak. old. Vses. shk. 10-ya no. 181-1.

165.

(U.S.S.R.)

PIVOVAROV, N.V.; RABINOVICH, S.G.; TAKCHENKO, A.N.; USMANOV, V.B.;
YATMANOV, B.A.

Photocompensating stabilizers. Izv. tekhn. no.3:44-46 Mr '65.
(MIRA 18:5)

L 36657-65 EWT(d)/EEC(k)-2/EEC-4 Po-4/Pq-4/Pg-4/Pk-4/Pl-4

ACCESSION NR: AP5007397

S/0286/65/000/004/0049/0050

AUTHOR: Mints, M. B.; Rabinovich, S. G.; Usmanov, V. B.

TITLE: Method of determining the time constant of photosensitive cells. Class 21, No. 168382

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 49-50

TOPIC TAGS: photosensitive cell, time constant measurement *qm*

ABSTRACT: A method of determining the time constant of photosensitive cells by varying their illuminance is proposed. To approximate operating conditions, the cell is inserted in the circuit of a photoelectric compensator operating under self-oscillation conditions. The time constant is either calculated on the basis of the critical conditions of dynamic stability or read from a previously calibrated balancing resistor in the feedback circuit of the compensator. Orig. art. has: 1 figure.

[DW]

ASSOCIATION: none

SUBMITTED: 26Nov62

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3221

Card 1/1

USMANOV, Yu.Kh.; ZAVALISHIN, F.S., redaktor

[Highly efficient use of grain combines] Vysokoproduktivnoe
ispol'zovanie zernovykh kombainov. Kazan', Tekhnikoizdat, 1955.
31 p. (MIRA 10:2)
(Combines (Agricultural machinery))

Usmanov, Lu. A.

774. Opredeleniye mineral'nykh usloreniy. Ist. 2-ye, Federatsion.
GFA, Bashkir. KN. IZD., 1955. 19c. 15 SM. 5.000 SMZ. 10 K.-
(85-1950) 631.22:543

80. Knizhnaya Letopis', Vol. 7, 1955

USHANOV, Yu. A

GERM

/ The specificity of nitrogen nutrition based on the evolution of nitrogen. Yu. A. Usmanov. *Zemledelie* 3, No. 2, 72-7. (1955).-- Plants have hereditary preferences for the source of N. The original nitride forms of N are postulated to give rise to NH_4^+ forms with the advent of life and later to NO_3^- forms. As a result, some plants have developed a preference for NH_4^+ and are called ammonophils. Rice and sugar cane are ammonophils. Plants preferring NO_3^- are nitrophils. Spring wheat, barley, lupines, flax, corn, hemp, and sunflower are nitrophils. The preferential requirements for N have their influence on the proteins produced and their homers. It would be profitable to establish the plant ecotypes from the point of view of the evolution of N to the specific requirements for N sources by plants. J. B. Joffe.

USSR/Soil Science. Soil Biology

J-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43842

Author : ~~Usanov Yu. A.~~

Inst : Not Given

Title : A Study of the Agronomic Value of Ashinskiy Phosphorite

Orig Pub : V sb.: Vopr. geol. agron. rud. M., AN SSSR, 1956, 41-46

Abstract : Ashinskiy phosphorite which is extracted in the Bachkir ASSR contains P_2O_5 -25.83%, R_2O_3 - 9.30%. In soil cultures the oat grain yield on acid soils was somewhat higher with phosphorite than with superphosphate, although it was lower on leached chernozems. In field tests summer wheat yielded a grain boost, in comparison with the unfertilized control, amounting to 11.1% with superphosphate, and 23.0% with phosphorite; oats yielded respectively 55.3 and 55.0%. The conclusion is drawn that Ashinskiy phosphorite (a fraction < 3 mm. and comprising ~ 30% of the total weight of the sample taken; it is easily sorted with a sieve) may be utilized as fertilizer with good results. -- A.M. Shchepetil'nikova

Card : 1/1

U.S.S.I.A.N., Yu 4

USSR/Soil Science. Mineral Fertilizers.

I-5

Abs Jour: Referat Zh-Biol., No 6, 25 March, 1957, 22478

Author : Usmanov, Yu.

Inst :

Title : Ashin Phosphorites and the Possibility of Their Use as Fertilizers.

Orig Pub: S. kh. bashkirii, 1956, No 4, 14-17

Abstract: Ashin phosphorites (near Vavilovo station on the Ufim railroad) contain from 10 to 36% P_2O_5 , from 45 to 55% CaO. The vegetative and field experiments with Ashin phosphorites, conducted by the Bashkir agricultural institute, and also experiments in collective farms in different sections of Bashkiria proved their high effectiveness. Especially large harvest increases were obtained by the use of phosphorite for winter rye.

Card : 1/1

-5-

USMANOV, Yu A

M.

USSR/Cultivated Plants - Fodder.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15722

Author : Yu. Usmanov, Z. Soshnina

Inst : Bashkir Agricultural Institute.

Title : The Effect of Fertilizer on the Mangel-Wurzel Yield.
(Vliyaniye udobreniy na urozhay Kormovoy svekly).

Orig Pub : S. kh. Bashkirii, 1956, No 9, 20-28.

Abstract : The department of agricultural chemistry of the Bashkir Agricultural Institute conducted tests in 1953 and 1954 to study the effect of mineral fertilizer and manure on the mangel-wurzel yield on the forest steppe of Bashkir. The greatest yield boost at 78.5 centners per hectare was gotten when applying P₂₀₀ and K_x 100 kilograms per hectare, and when 30 tons per ha. of manure was added as well there was 51.6 centners per ha.

Card 1/2

USSR/Cultivated Plants - Fodder.

H.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15722

Nitrogenous fertilizers only increased the top mass,
hence their application in the first years of cultivated
leached out chernozem soils is optional.

Card 2/2

125

COUNTRY : USSR
 CATEGORY : Soil Science. Mineral Fertilizers.
 REF. NO. : FizBiol., No. 23 1958, No. 1044-74
 AUTHOR : Usmanov, Yu. A.
 INST. : Bashkir Agricultural Institute
 TITLE : Results of Field Experiments with Asha Rock Phosphate

ORIG. PUB. : Tr. Bashkirsk. s.-kh. in-ta, 1957. g. No. 2. 31-42

ABSTRACT : In 1953 near the city of Asha, Chelyabinskaya oblast, an occurrence site for rock phosphate containing from 19 to 25% P_2O_5 was discovered. The agrochemistry chair of Bashkir Agricultural Institute tested the effect of meal made of this rock phosphate on the yield of various crops under field and vegetative experimental conditions. They also studied the effect of P_2O_5 on the chemical composition and yield quality and on the agrochemical properties of the soil. Experiments were carried out on various soils (chernozems and grey forest soils) with grains (winter and spring), potatoes, sugar beet, lupine, vetch and other crops. It

1/2

COUNTRY :
CATEGORY :

AB. JOUR. : RZhBiol., No. 23 1958, No. 104474

ATTACH :
INSTR. :
TITLE :

ORIG. PUB. :

ABSTRACT : was established that P_f increases the yield almost to the same extent as does P_n of the majority of plants on all experimental soils (except carbonate chernozem). A map-diagram of the regions of rock phosphate formation of the Bashkir ASSR is drawn up. The application of P_f under winter grains at the rate of 50-60 kg/hectare of P_2O_5 is recommended, as is also its use in the form of composts. --V. V. Tserling

Card: 2/2

14

Yu. A. USMANOV (Bashkir Inst. of Agriculture) V. D. BOBOK AND N. N. DZENS-LITOVSKAYA
(Leningrad Univ.), K. G. RAMAN (Latvian Univ.), V. A. DEMENT'YEV (Byelorussian
Univ.), A. V. STUPISHIN (Kazan' Univ.), B. A. LUMEN (Kirghiz Univ.)

"The economic division of their respective regions"

report presented at an Inter-University Conference on Dividing the USSR into
Economic Regions, 1-5 February 1956, Moscow, (Izv. Ak nauk SSSR, 4, 146-49;
1958 author - Gvozdetakiy, N. A.)

USMANOV, Yu.A., zasl. deyatel' nauki Bashkirskoy ASSR, otv. za vypusk;
KHRIZMAN, I.A., glav. red.; KOBAYAKOV, I.A., red.; ABDUL'MENEV,
M.I., red.; DYMENT, O.N., red.; IMAYEV, M.G., red.; MOSKOVICH,
S.M., red.; ROZHDESTVENSKIY, V.I., red.; SERGEYEV, L.I., red.;
SIMONOV, V.D., red.

[Chemicalization of agriculture in Bashkiria] Khimizatsiia sel'-
skogo khoziaistva Bashkirii; trudy konferentsii. Ufa, Bashkirskoe
respublikanskoe pravlenie Vses. khim. ob-va im. D.I. Mendeleeva.
No.1. 1959. 117 p. (MIRA 16:1)

1. Respublikanskaya konferentsiya po voprosam khimizatsii sel'-
skogo khozyaystva BASSR.
(Bashkiria--Agricultural chemistry)

KHRIZMAN, I.A., prof., glav. red.; USMANOV, Yu.A., prof., zam.
glav. red.; SERGEYEV, L.I., doktor biol. nauk, prof.,
otv. za vypusk; KOBYAKOV, I.A., tekhn. red.

[Chemicalization of agriculture] Khimizatsiia sel'skogo
khoziaistva; doklady i teziy. Ufa, Bashkirskoe respub-
likanskoe pravlenie Vses. khim. ob-va im. D.I. Mendeleeva.
Vol.3. 1961. 86 p. (MIRA 16:4)

1. Nauchno-proizvodstvennaya konferentsiya po mikroelemen-
tam i ikh znacheniya v sel'skom khozyaystve Bashkirii.
2. Kafedra agrokhimii Bashkirskogo sel'skokhozyaystvennogo
instituta (for Usmanov). 3. Kafedra obshchey khimii Ufinskogo
aviatsionnogo instituta (for Khrizman).
(Bashkiria--Agricultural chemistry)

BOYBUTAYEV, K.B., kand. tekhn. nauk; MURADOV, Zh.M.; USMAILOV, Yu.,
assistant; KOSIMOV, Sh., red.

[Use of solar energy in the national economy] Kuesh
energiasidan xalk khuzhaligida foidalanish. Toshkent,
"Kizil Uzbekiston," "Pravda Vostoka" va "Uzbekistoni
Surkh," 1964. 40 p. (Uzbekiston SSR "Bilim" zhamiati,
no.2) [In Uzbek] (MIRA 18:6)

L 3683-66 EWT(d)/T IJP(c).

ACCESSION NR: AR5009892

UR/0044/65/000/002/B097/B097

517.948.32:517.544

SOURCE: Ref. zh. Matematika, Abs. 2B400

AUTHOR: Barkhin, G. S.; Usmanov, Z. D.

TITLE: The Hilbert problem for piecewise regular generalized analytic functions

CITED SOURCE: Sb. Issled. po krayevym zadacham teoriy funktsii i differents. uravneniy. Dushanbe, 1964, 113-132

TOPIC TAGS: Hilbert space, mathematical analysis, differential equation, analytic function

TRANSLATION: In the multiply connected region D^- , bounded by $m + 1$ simple closed Lyapunov-type curves: $L = L_0 + L_1 + \dots + L_m$, of which L_0 contains the rest, and cut along n simple closed curves: $l = l_1 + \dots + l_n$, the following boundary value problem is solved: To find a solution to the differential equation

$$\frac{\partial \bar{w}}{\partial \bar{z}} + A\bar{w} + B\bar{w} = 0 \quad (1)$$

(a generalized analytic function), satisfying the boundary conditions

$$\operatorname{Re}[G(t)\bar{w}^-(t)] = g(t), \quad t \in L, \quad (2)$$

$$w^+(t) - a(t)\bar{w}^-(t) + b\bar{w}^-(t), \quad t \in l. \quad (3)$$

Card 1/2

L 3683-66

ACCESSION NR: AR5009892

The following restrictions are imposed: the curves L_i have curvature satisfying the Hölder condition; G , g , and the derivatives of a and b satisfy the Hölder condition; a and G do not tend towards zero. It is proven that if, in addition,

$$|a(t)| > |b(t)|$$

then in relation to the number of linearly independent solutions and conditions of solvability, the problem (1) - (3) behaves in the same way as the Hilbert boundary value problem (2) for analytic functions with index

$$\kappa = \text{Ind } G(t) + \text{Ind } a(t).$$

The method of solution consists of introducing a new function which satisfies the Beltrami differential equation in D^- , and for which the boundary condition (3) reduces the condition of continuous extension. The results are used to calculate the number of solutions to problems on infinitely small and finite deformation of surfaces. F. Gakhov.

SUB CODE: MA

ENCL: 00

^{KC}
Card 2/2

L 57660-65 EPA(s)-2/S/T(±)/EPF(c)/EPF/Δ+P(j) T Po-4 Pr-4/Ps-4/Pt-10

ACCESSION NR: AT4040802 8/3099/32/900/001/0195/0115

AUTHOR: Usmanov Z. Kamenskiy I. V. Lisey I. F. Kvarskaya R. M.

TITLE: Synthesis and investigation of the polymers of furfural with ketones

SOURCE: AN UzSSR. Institut khimii polimerov. Fizika i khimiya prirodnykh i sinteticheskikh polimerov, no. 1, 1963, 100-111.

TOPIC TAGS: furfural polymer, furfurylidene methylethylketone, methylethylketone

ABSTRACT: In a continuation of their previous work with furfural and acetone, the authors prepared furfurylidene methylethylketone by mixing furfural with excess methylethylketone at 10C and allowing the mixture to react in the presence of alcohol: Na⁺ for 4 hrs., yielding an oily yellow-orange liquid in 57% yield. Thermal resinification took place when this product was heated at 240-245C for 12 hours. Heating in the presence of an initiator such as benzoyl peroxide allowed resinification to take place at 180-240C.

Card 1/2

L 37660-65

ACCESSION NR: AT4040802

2

In the presence of alkaline catalysts, furfurylidene methylethylketone forms a fusible, soluble polymer at 130-180C; this polymer can then be hardened in the presence of

fusible and insoluble. These studies also showed that the hardened resin based on furfurylidene methylethylketone has high heat resistance (up to 300C) and is hard

ACCESSION NR: AT4040802 (UzSSR)

SUBMITTED: 00

NO REF SOV: 008

OTHER: 006

Card 2/2 *file*

L 37661-65

~~BPA(c) - 2/EST(c),/EST(c),/PRK/ESTK)/1/1~~

~~S/3699/E2/009/001/0115/0123~~

W6/E

ACCESSION NR: AT4049803

AUTHOR: Usmanov, Z.; Kamenskiy, I. V.; Losev, I. P.; Kovarskaya, B. M.

TITLE: Synthesis and investigation of the chemical products of formal with higher aliphatic alcohols

SOURCE: AN USSR Institute of Chemistry, Moscow, USSR, *Chemical Abstracts*, 57:123, 1962, 115-123, Russian.

hardening, alkaline catalyst, the film becomes

ABSTRACT: In a continuation of their earlier work with methylethylketone (see Part II),

L 17061-65

ACCESSION NR: AT4946803

like polymer was obtained at 1.0 x 10⁴ g. The rate of polymerization increasing sharply with

groups of the monomer at 1.0 x 10⁴ g. On the basis of the results of the polymerization of the monomer at 1.0 x 10⁴ g.

The polymerization of the monomer at 1.0 x 10⁴ g. was carried out in the presence of the monomer at 1.0 x 10⁴ g. and the polymerization of the monomer at 1.0 x 10⁴ g.

Card 2/3

L 37661-65

ACCESSION NR: AT4040803

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry,
AN UzSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: OC

NO REF SOV: 007

OTHER: 001

Card 3/3

L 37662-65 EPA(s)-2/EWT(m)/EPF(c)/EFR/EWP(j)/T PC-4/PT-4/PS-4/IT-20 75d/M

ACCESSION NR: AT4040304

AUTHOR: Usmanov, Z., Kamenskiy, I.V., Losev, I.P., Kovarskaya, B.M.

aliphatic ketones, and polymers of
polymers of furfurylidene methylbutylketone

SOURCE: AN UzSSR. Institut khimii polimerov. Fizika i khimiya prirodnaykh i sinte-
ticheskikh polimerov, no. 1, 1962, 123-130

TOPIC TAGS: furfural polymer, furfurylidene methylbutylketone, methylbutylketone
polymer, polyketone, ionic catalyst, benzenesulfonic acid, sin formation, polymer
hardening, alkaline catalyst, thermal resinification

ABSTRACT: In continuation of work on the synthesis of furfurylidene methylbutylketone
ketone (see Parts 1 and 2), the authors prepared furfurylidene methylbutylketone
freshly distilled furfural and methylbutylketone, obtaining a pale-green oil which was
soluble and stable in organic solvents. Thermal resinification of this oil was accompa-

readily soluble in organic solvents. —
Card 1/2

I 37662-65

ACCESSION NR: AT4040804

catalysts. In view of the long periods of heating required for resinification in the presence of NaOH, however, alkaline catalysts are not considered suitable for the polymerization.

slowly in the presence of ionic catalysts such as benzenesulfonic acid or H_2SO_4 (less rapidly with $AlCl_3$, $ZnCl_2$, $SnCl_4$), although the rate is slower than that with

4 figures, 5 tables and 2 formulas.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry, AN UzSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: OC

NO REF SOV: 002

Card 2/2

ACCESSION NR: AR4015668

S/0081/63/000/021/0490/0490

SOURCE: RZh. Khimiya, Abs. 215116

AUTHOR: Usmanov, Z.; Kamenskiy, I. V.; Losev, I. P.; Kovarskaya, B. M.

TITLE: Synthesis and study of the condensation products of furfural with higher aliphatic ketones and the polymers based on them. Parts 1-3.

CITED SOURCE: Sb. Fizika i khimiya prirod. i sintetich. polimerov. Tashkent, AN UzSSR, vyp. 1, 1962, 105-130

TOPIC TAGS: furfural, furfural condensation, aliphatic ketone, higher aliphatic ketone, ketone polycondensation, ketone based polymer crystallization

ABSTRACT: The authors studied the polycondensation of furfurylidene methylethyl- (I), furfurylidene methylpropyl- (II) and furfurylidene methylbutyl- (III) ketones. When heated to 240C in the presence of alkaline reagents, I forms a soluble and fusible polymer, which can be hardened under the influence of ionic catalysts (H_2SO_4 , benzenesulfonic acids (IV), Lewis acids). According to data from thermo-mechanical studies, hardening in the presence of IV proceeds in 3 stages: 1) a fusible, low-molecular, soluble tar; 2) a high-molecular tar, swelling in solvents; 3) an infusible and insoluble stereospecific polymer. Hardened tar prepared from

Card 1/2

ACCESSION NR: AR4015668

I shows increased thermal stability (up to 300C). Tars can be prepared from II and III in the presence of ionic catalysts and require longer heating periods due to the spatial effect of the alkyl radicals. V. Nemirovskiy

DATE ACQ: 09Dec63

SUB CODE: CH

ENCL: 00

Card 2/2

ACCESSION NR: AP4010564

S/0291/63/000/006/0076/0079

AUTHOR: Usmanov, Z.; Kamenskiy, I. V.; Tadzhiyeva, M.

TITLE: Investigation of the process of forming polymers based on polyene furan aldehydes and some of their analogs. I. Investigation of the process of hardening polymers based on: 2-methyl-3-(alpha-furyl)propene-2-ol, 2-ethyl-3-(alpha-furyl) propene-2-ol, and 5-(alpha-furyl)pentadiene-2, 4-ol.

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 6, 1963, 76-79

TOPIC TAGS: polyene furan aldehyde resin, polymer formation, furfurylidene-aldehyde resin, furfurylidenealdehyde condensation

ABSTRACT: The furfurylidenealdehydes form infusible and insoluble resins in the presence of ionic catalysts or on heating. In a reaction with benzenesulfonic acid (less exothermic than with H_2SO_4), the solidification is faster with higher temperature and larger amount of catalyst. The strength and thermal stability

Card 1/2

ACCESSION NR: AP4010564

of the polymers obtained are lowered with increasing alkyl chain length, and increased with a greater number of ethylene groups in the side chain. Resinification and hardening of furfurylidenealdehydes are apparently realized by the condensation of the carbonyl groups with active hydrogen atoms of the furan ring, and also by partial exposure of the side ethylene group. Orig. art. has: 3 equations, 3 tables and 1 figure.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii Institut im. Mendeleyeva
Institut khimii polimerov AN UzSSR (Moscow Chemical Engineering Institute,
Institute of Polymer Chemistry, AN UzSSR)

SUBMITTED: 17May63

DATE ACQ: 11Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 001

OTHER: 003

Card 2/2

L 33225-65 ENT(m)/EFF(o)/ENP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP4028152

8/0291/64/000/001/0060/0066

AUTHOR: Usmanov, Z.; Kamenskiy, I.V.; Losev, I.P. (Deceased)

23
22
B

TITLE: Synthesis and investigation of condensation products of furfural with high-

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 1, 1960, 11-17

TOPIC TAGS: furfural condensation product, furylhexadienone, furylheptadienone, furylhexadienone polymer, furylheptadienone polymer

ABSTRACT: Polymers based on furylhexadienone (I) and furylheptadienone (II) have not been previously reported. I was synthesized from furylacrolein and a diene and II from furfural and a diene. The polymers were obtained by the reaction of the monomers with a diene in the presence of a catalyst.

Card 1/2

7-33225-65

ACCESSION NO.

of a fusible organic solvent-soluble polymer, an infusible polymer, soluble polymer
and finally, an infusible insoluble polymer. With increasing alkyl chain length,
copolymerization and copolymerization.

Card 2/2

USMANOV, Z.

Fungous diseases of grapes in the Fergana Valley. Uzb. biol.
zhur. 8 no.2:18-21 '64. (MIRA 17:9)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut zashchity
rasteniy.

ACCESSION NR: AP4035112

S/0291/64/000/002/0058/0061

AUTHOR: Tadzhiyeva, M.; Usmanov, Z. U.; Kamenskily, I. V.

TITLE: Investigation of the process of forming polymers based on polyene furan aldehydes and some of their analogs. Communication II: Investigation of the process of forming polymers based on furfural and butyraldehyde

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 2, 1964, 58-61

TOPIC TAGS: furfural butyraldehyde condensation product, polymerization, furylpropenal, preparation, curing, heat polymerization, radical initiator, ionic catalyst, alkali catalyst

ABSTRACT: The preparation and curing of polymers based on the condensation product of furfural with butyraldehyde was investigated. It was established that the 2-ethyl-3-(alpha-furyl)-propen-2-al can form polymers under suitable conditions. The temperature required for heat polymerization was above 250C. Radical initiators, specifically benzoyl peroxide, were found to have no effect on

Card

1/2

ACCESSION NR: AP4035112

the polymerization of this compound. With 5% alkali as catalyst, at high temperatures, a fusible polymer was formed (no polymerization occurred with 1% alkali at 180 and 250C). In the presence of ionic catalysts, thermosetting polymers which will form three-dimensional structures were readily formed. Controllable curing was effected in the presence of benzenesulfonic acid or very small amounts of sulfuric acid. Orig. art. has: 4 formulas and 1 table.

ASSOCIATION: NIITsF Goskhimnesteckomiteta pri Gosplane SSSR (NIITsF State Petrochemical Committee of the State Planning Commission SSSR)

SUBMITTED: 07Jul63

ATD PRESS: 3078

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 007

OTHER: 003

Card 2/2

1.55013-00 EWI(m)/LFF(c)/ENP(j)/1 10-1/ET-1 RM

ACCESSION NR: AP5010258

UR/0291/65/000/001/0047/0051

AUTHORS: Usmanov, Z.; Kamenskiy, I. V.; [Losev, I. P.] (deceased)

TITLE: Synthesis and investigation of condensation products of furfural with higher aliphatic ketones and their polymers. Communication 5. Investigation of the congealing process for condensation products of furfural with methylamyl ketone and methylhexyl ketone

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 1, 1965, 47-51

TOPIC TAGS: furfural, polymer, condensation

ABSTRACT: The investigation is an extension of previous work by Z. Usmanov, I. V. Kamenskiy, I. P. Losev, and B. M. Kovarskaya (Sobshcheniye I, II, III, Izd-vo AN. UzSSR, vyp. 1, 1962). Furfurylidene-methylamylketone was synthesized after the method of A. A. Ponomarev (Issledovaniye v oblasti furanovykh al'degidov i ketonov i ikh proizvodnykh. Doktorskaya dissertatsiya, MSU, 1954). Furfurylidene-methylisohexylketone was prepared after the method of A. A. Ponomarev (above) and of A. A. Ponomarev, Z. V. Til', I. Markushina, and K. Sapunar (DAN SSSR, 93, No. 2, 297, 1953). The polymerization goes through three stages, 1) products are fusible and soluble in organic solvents; 2) products are nonfusible and only partially

Card 1/2

L 35013-55
ACCESSION NR: AP5010258

soluble in organic solvents; 3) products are nonfusible and are insoluble in organic solvents. The time required to harden the furfurylidene ketones depends on the temperature and the amount of catalyst. The effect of temperature on catalyst is less pronounced for furfurylidene methylhexylketone. The IR spectrum of the polymeric form of furfurylidene methylamylketone showed the absence of the ethylene ($1650-1600\text{ cm}^{-1}$), carbonyl ($1700-1650\text{ cm}^{-1}$), methylene ($1100-1060\text{ cm}^{-1}$) and the α -hydrogen furane ring ($1070-1000\text{ cm}^{-1}$) absorption bands. To obtain the third hardening stage, the polymers were heated for 1.5 hours at 115°C , 1 hour at 140°C , 1 hour at 180°C , and 0.5 hour at 220°C in the presence of 5% sulfuric acid in the case of furfurylidene methylamylketone and 5% benzenesulfonic acid in the case of furfurylidene methylhexylketone. Water is liberated during hardening at elevated temperatures. Samples of furfurylidene methylamylketone and furfurylidene methylhexylketone deform when heated to $120-125^\circ\text{C}$ and $100-105^\circ\text{C}$ respectively. Orig. art. has: 3 tables and 2 graphs.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im. Mendeleyeva
(Moscow Chemical Technological Institute)

SUBMITTED: 24Jul63

ENCL: 00

SUB CODE: CC, GC

NO REF SOV: 007

OTHER: 006

Card 2/2

L 16170-66 EWT(m)/EWP(j)/T RM

ACC NR: AP5025430

SOURCE CODE: UN/0291/65/000/004/0035/0039

AUTHOR: Usmanov, Z.; Kamenskiy, I. V.; Losev, I. P. [(deceased)]

ORG: NIIKHTs

TITLE: Synthesis and investigation of condensationⁿ products of furfural and higher aliphatic ketones and of the corresponding polymers. 6. Investigation on the curing process of furfural-methyl isopropyl ketoneⁿ and furfural-methyl isobutyl ketone condensation products

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 4, 1965, 35-39

TOPIC TAGS: aliphatic ketone, chlorinated aliphatic compound, ketone, polymer, condensation reaction, catalytic polymerization

ABSTRACT: The title condensation products (I and II, respectively) were synthesized by the methods applied by Kasiwagi (J. Bull. chem. Soc. Japan, 1, No 5, 90(1926) and by Wienhaus and Leonhardi (C. N 1, 224, 1930). The polymerization was carried out at 80-85 and at 115-120C, in the presence of 5-15% of benzenesulfonic acid as catalyst. The latter was added to the monomer at room

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temperature, without a solvent. The duration of the process depended on the amount of the catalyst and on the temperature. I was an orange oil which contained C 73, H 7, and had d_4^{20} 1.02, n_D^{20} 1.558, b.p. 118-121C/8-9 mm; II was a yellow liquid, C 74.1, H 7.8, d_4^{20} 1.01, n_D^{20} 1.5518, b.p. 119-122/7. The polymerization of I and II occurs in 3 stages. In the 1st and in the 2nd stages solidification is accompanied by saturation of the ethylene group. In the case of II this is accompanied by a partial condensation of the CO with H atoms of the CH₂ group and separation of 0.09 mole H₂O. The 3rd stage occurs owing to further condensation of the CO with the α -H of the furan ring and the CH₂ group. The formation of a dense space structure results in a good thermal stability (up to 250C for I and up to 200C for II). It is shown that formation of polymers from iso alkyl ketones requires more severe conditions than those needed when normal ketones are used. Orig. art. has: 3 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 24Jul63/-- ORIG REF: 1005/000TH/REF: 1007

Card 2/20

USSR / Human and Animal Physiology. Growth Physiology. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40897.

Author : Usmanova, A. F.

Inst : Blagoveshchensk Medical Institute.

Title : The Reaction of Balance in the Ontogenesis of Man.

Orig Pub: Tr. Blagoveshchensk. med. In-ta, 1956, 2, 130-133.

Abstract: No Abstract.

Card 1/1

6

MUTIGSKOV, A.Ya.; MAMINOV, O.V.; ISHAGILOV, K.G.; USMANOV, A.G.

Entropy method of analysis of chemisorption processes. Izv. Vys.
ucheb. zav.; khim. i khim. tekhn. 7 no.3:486-491 '64. (MITA 17:10)

1. Kazanskiy khimiko-tekhnologicheskoy institut imeni K.r.ova,
kafedra protsessov i apparatov khimicheskoy tekhnologii i teplo-
tekhniki.

L 43733-65

COLL: NP: AR 0009445

of magnitudes T , C and C' along the crosssection of a channel after preslecting values of two constants. A.M. Yaglom

SUB CODE: ME, TD ENCL: 00

llc
Card 2/2

BEREZHKOV, L.F.; GAROVA, I.I.; YELIZAROVA, Z.I.; USEANOVA, A.V.; GORBUNOVA,
N.G.; NIKOLAYOVA, G.M.

Characteristics of the course of toxic forms of diphtheria of the
pharynx in children during 1954-1955. Nauch. rab. asp. i klin. ord.
no.6:61-67 '60. (MIA 14:12)

1. Kafedra pediatrii (zav. deystvitel'nyy chlen AMN SSSR prof. G.M.
Speranskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey.
(DIPHTHERIA) (PHARYNX---DISEASES)

USMANOVA, A.V.

Problems in the diagnosis and treatment of typho-paratyphoid diseases. Sov. med. 25 no.11:123-128 N '61. (MIRA 15:5)

1. Iz kafedry infektsionnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. G.P.Rudnev) Tsentral'nogo instituta usovershenstvovaniya vrachey.

(TYPHOID FEVER)

(PARATYPHOID FEVER)

USMANOVA, A.V.; KURDOVA, N.S.; BOGOMOLOV, B.P.

Clinical and microbiological characteristics of Salmonellosis
produced by S. Breslau. Zhur.mikrobiol.epid.i immun. 33 no.5:122-
123 My '62. (MIRA 15:8)

1. Iz Astrakhanskogo meditsinskogo instituta i infektsionnoy
bol'nitsy imeni V.M.Bekhtereva,
(SALMONELLA)

VETLUGINA, K.F.; USMANOVA, A.V.; KOL'YAKOVA, T.A.

Liver abscesses of amebic etiology. Kaz.med. zhur. no.5:68-70
S-0'63 (MIRA 16:12)

1. Kafedra infektsionnykh bolezney (zav. - dotsent A.P.
Vozzhayeva) Astrakhanskogo meditsinskogo instituta i Infek-
tsionnaya bol'nitsa imeni prof. Bekhtereva (glavnyy vrach
V.I.Gembitskiy) Astrakhan'.

USMANOVA, D.A.

2

S/081/62/000/001/046/067
B158/3101

AUTHORS: Khodzhayev, G., Zemlinskiy, E. Ye., Chernov, M. P.,
Kvasnikova, K. A., Kul'metov, A., Tsapenko, M. N., Usmanova,
D. A.

TITLE: Petroleum from fields in Southern Alamyshik

PERIODICAL: Referativnyy zhurnal. Khimiya, No. 1, 1962, 439-440,
abstract 1W79 (Uzb. khim. zh., no. 1, 1961, 55-64)

TEXT: Uzbekian petroleum from the field mentioned have low sulfur content, are resinous, have a paraffin base and have a composition approaching that of petroleum from paleogenic and neogenic beds in the same field. The average clear fraction content is 35%, this boils at up to 300°C; the gas oil fraction (300-400°C) is 11-12%, light oils (400-460°C) 13% and asphalt (>460°C) 33.5%. The oils obtained are of low viscosity and require deparaffination. The solid paraffin yield (on petroleum) from fractions up to 460°C is ≤ 5.1%, and in the individual narrow fractions

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Petroleum from fields in...

S/081/62/000/001/046/067
B158/B101

up to 20-21%. The paraffin is medium fusible. The total solid paraffin content is 10%. [Abstracter's note: Complete translation.]

✓

Card 2/2

S/081/62/000/024/010/052
B117/B186

AUTHORS: Adylova, T. T., Usmanova, D. A., Ryabova, N. D.

TITLE: Cryoscopic determination of aromatics in the hydrocarbon part of petroleum

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24 (II), 1962, 733,
abstract 24M258 (Uzb. khim. zh., no. 2, 1962, 77 - 79)

TEXT: An adsorption variant of the quantitative cryoscopic determination of aromatic hydrocarbons is described, based on measuring temperature depression in the crystallization of cyclohexane solutions before and after these are chromatographed on coarse-pored silica gel. 0.5 g hydrocarbons are dissolved in 20 ml cyclohexane and the crystallization temperature of the solution is determined. The solution is then passed through a glass tube of 1 cm diameter and 40 cm high, filled with 40 g KCK (KSK) silica gel of the fraction 0.25 - 0.5 mm and dried preliminarily at 170°C. The amount of aromatic hydrocarbons, given in mole%, is then determined from the crystallization temperatures of the initial cyclohexane, the hydrocarbon solution in cyclohexane, and the filtrate. The error in determining the total content of aromatic hydrocarbons was < 2 %. The method can be
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Cryoscopic determination of ...

S/081/62/000/024/010/052
B117/B186

applied to determining the content of aromatic hydrocarbons in the total hydrocarbon part of petroleum as well as in gasoline, kerosene, and oils.
[Abstracter's note: Complete translation.]

Card 2/2

1. MARTYNOV, D., MAMAYEV, F.
2. U372 (410)
4. Comets - 1952
7. Observations of the comet Harrington 1952e at the Engelhardt Astronomical Observatory, Astron. tsir., no. 130, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

STUDENTSOV, K.P.; USMANOVA, F.I.

Dynamics of serological reactions in cattle in brucellosis. Trudy
Inst.kraev.pat. AN Kazakh.SSR }174-184 '56. (MLRA 10:2)

1. Kazakhskiy nauchno-issledovatel'skiy veterinarnyy institut.
(BRUCELLOSIS IN CATTLE) (COMPLEMENT FIXATION)

USMANOVA, F.I.; STUDENTSOV, K.P.

Morphological composition of the blood in healthy Ala-Tan cattle
and in those affected by brucellosis. Trudy Inst.kraev.pat. AN
Kazakh.SSR 3:185-195 '56. (MLRA 10:2)

1. Kazakhskiy nauchno-issledovatel'skiy veterinarnyy institut.
(BRUCELLOSIS IN CATTLE) (BLOOD)

USSR / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Brucelli. F-4

Abs Jour: Ref Zhur-Biol., 1958, No 17, 76766.

Author : Usmanova, F. I.; Studentsov, K. P.
Inst : Veterinary Institute, Kazakh Affiliate, All-Union
Academy of Agricultural Sciences imeni I. V. Lenin.
Title : Determination of the Length of Preservation of
Active Properties of Anti-Brucellosis Serum.

Orig Pub: Tr. In-ta vet. Kazakhsk. fil. VASKHNIL, 1957, 8,
34-39.

Abstract: No abstract.

Card 1/1

USSR/Diseases of Farm Animals. Diseases Caused by
Bacteria and Fungi.

R-1

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83514

Author : Studentsov, K. P.; ~~Usmanova, F. I.~~
Inst : Institute of Veterinary Medicine, Kazakh
Section of the All-Union ordena Lenin Aca-
demy of Agricultural Sciences imeni V. I.
Lenin.

Title : Treating Bovine Brucellosis by Employing Serum
Prepared According to the Method of Professor
Uvarov.

Orig Pub : Tr. In-ta vet. Kazakh. fil. VASKhNIL, 1957,
8, 40-53

Abstract : Antibrucella B serum (obtained from hyperi-
mmunized bulls) and S serum (obtained from hyperi-
mmunized sheep) prepared according to the method
of V. G. Uvarov, were used for the treatment of
cattle. As a result, a gradual decline of agglu-

Card 1/3

USSR/Diseases of Farm Animals. Diseases Caused by
Bacteria and Fungi.

R-1

Abs Jour : Ref Zhur-Biol., No 18, 1958 83514

Abstract : tination titers with a transition to negative titers was detected in 31.8 percent of the animals. The transition from positive to negative indices in cows subjected to treatment, occurred basically at the expense of positive titers (1:00 - 1:200) and not at the expense of doubtful titers, which was the case in control cows. Effects of serum therapy upon the blood picture in cattle is evidenced by the fact that erythrocytes, leukocytes, eosinophils, and neutrophils were restored to normal counts. As results of hematological and serological investigations for treated animals were compared, it was established that blood picture changes tending towards normalization may be observed in those animals which display decreased agglutination titers. Changes which take place in indicators of agglutination reactions, and changes of the blood picture

Card 2/2

USSR/Diseases of Farm Animals. Diseases Caused by
Bacteria and Fungi.

R-1

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83514

Abstract : re which were observed in test animals, are results of the body's response to the administration of serum. This phenomenon is apparent as the body activates its defensive functions, which reflects favorably upon the course of infectious processes and brings about complete recovery in some of the animals.--From the author's summary.

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